Inc. 1910 Public Works

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Maria Lopez 4/09/2021
EPA-Idaho Operations Office
950 W. Bannock Ste 900
Boise, ID 83702
Via email: Lopez.Maria@epa.gov

RE: City of Driggs Update: CWA-10-2018-0206

Dear Ms. Lopez,

The following letter summarizes activities the City of Driggs has undertaken to bring the Teton Valley Regional Wastewater Reclamation Facility into compliance. This letter will focus on our efforts since April, 23 2020. I am happy to review any of our previous efforts with you and what are the next planned steps.

The City of Driggs contracted with Forsgren Associates in the spring of 2019 to update our Wastewater Facilities Plan. Forsgren's initial assessment, in March of 2020, concluded the treatment plant was at hydraulic and loading capacity and expansion was needed. The City questioned the assessment, as previously noted, as we had noted seasonal flow increases associated with high groundwater levels. Forsgren was requested to pause the study and allow the city to determine the source of the increased flows. The city was concerned the data was skewed due to significant infiltration flows into the collection system.

The city public works department conducted a visual inspection of the collection system from late May through late June. City staff identified approximately 30 locations where groundwater was infiltrating into the collections system. These were primarily manholes, with some leaking service connections and two cracked pipes. The city contracted with Val Kotter & Sons and with ISS, Inc. to seal the leaks. The city was able to reduce treatment plant influent flows by approximately 250,000 gallons per day, through these efforts. One service line could not be repaired due to elevated groundwater, however this was repaired in the fall of 2020 and should result in additional 40,000 gallons per day reduction. The city has scheduled ISS, Inc. for the week of June 7, 2021 to repair any additional leaks found in the spring of 2021.

Forsgren was directed to continue to collect and analyze data through late fall of 2020 and update the report based on the revised treatment plant flows. Forsgren's revised assessment concluded that the plant was at approximate 60% of hydraulic capacity, but that the BOD loading was greater than the design parameters (362mg/L vs 250 mg/L). A final draft was submitted to public work for review on April 1, 2021. Forsgren's recommendations include a new outfall to a larger receiving stream and conversion/expansion to an activated sludge treatment process. The city is in the process of reviewing the draft facility plan.

The city has actively pursued avenues to bring the facility into compliance while awaiting the result of the facility study.

- Cold water source mapping: sample temperatures were taken throughout the system in late March of 2020, including in the City of Victor and along the transmission line. Temperatures varied

between 4C and 8C but were relatively consistent based on the area within the collections system (lift stations relatively close to each other, but not connected, showed similar temperatures). Based on these findings, cold temperatures are prevalent throughout the collection system. This seems logical as our drinking water temperatures vary between 5C and 7C during the winter months.

- The treatment plant was seeded with nitrifiers (Biolynceus Probiotic Scrubber NN) in mid-May. No reduction in the ammonia discharge levels were observed.
- After flows were reduced and temperatures increased (16C), the treatment plant was seeded with liquid nitrifiers (Advantage ADMicro NITc) in mid-July. No reduction in the ammonia discharge levels were observed.
- The city began an implementation plan for pre-treatment ordinance, however once the BOD loading issue was discovered by Forsgren creating a maximum loading discharge for commercial/industrial facilities became a higher priority. The cities of Driggs and Victor are working together to determine the loading limits and how to administer this type of program.
- A design proposal was received from Forsgren for a new outfall, however it was determined that a Request for Qualification was needed. Additionally, the city wanted more information on alternative discharge locations as the plant would probably still violate ammonia limits at the proposed location (Teton River) and wanted to ensure any new discharge configuration was integrated with any treatment plant upgrades/expansion/changes.

The MSABP basins and media are recommended to be cleaned and inspected every 10-years, per the manufacturer. The City decided to clean and inspect the east basin earlier than anticipated (7 years) due to the poor ammonia performance of the system. We determined that cleaning can only be done during low flows, which allow all flow to be diverted to one treatment basin and stay within the hydraulic design capacity of the basin. The city received a proposal to clean the east basin in late fall of 2020, however winter came early and temperatures dropped below freezing, thereby creating safety and freezing pipe issues.

Media rack removal from cell two of the east MSABP basin began on April 5. The media racks were removed, washed and accumulated sludge was removed from the concrete basin and pumped into the lagoons. Rack removal and cleaning of an MSABP had not been done on any know plant of this type prior to April 5. Representatives from Forsgren and Aquarius (manufacturer) were on-site to observe and provide input. The infrastructure was in good condition and minor repair were made to the media. Aquarius recommended an infrastructure process change (blocking the lower pass-through port) to force more influent contact with the media. This change will be implanted as we clean each cell. This project is anticipated to take approximately 5 weeks.

The goal of this project is to reset/restart the east basin and monitor its performance versus the west basin. If we see improved performance in the east basin, the west basin will be scheduled for cleaning in the fall (next low flow season). Additionally, liquid nitrifiers will be added to the east basin in an attempt to re-establish ammonia removal bacteria.

Although we have made progress with the current facility, we are unable to meet our ammonia compliance limits year-round. The city has actively been trying to solve this issue and hopefully we have shown that we are taking this very seriously. I am happy to discuss what our next steps need to be and work with you in any capacity needed.

Signed,

Jay T. Mazalewski, PE
Director of Public Works

East Basin Cell Two Cleaning Operations: